



[600.1033]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re: Application of: Kevin Francis ALBERT et al.
Serial No.: 09/534,466
Filed: 03/24/2000
For: DEVICE AND METHOD FOR
CONTROLLING WEB TENSION
Art Unit: 2854
Examiner: Ren Luo YAN
Confirmation No.: 3314

Mail Stop: APPEAL
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

June 11, 2004

APPELLANTS' BRIEF UNDER 37 C.F.R. § 1.192

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Final Rejection dated August 27, 2003 in this application. An original and two copies of this brief are submitted herewith. The statutory fee of \$330.00 is paid concurrently herewith.

1. REAL PARTY IN INTEREST

The real party in interest is Heidelberger Druckmaschinen AG, a German corporation having a place of business at Kurfuersten-Anlage 52-60, D-69115 Heidelberg, Germany, the assignee of the entire right, title and interest in the above-identified patent application. The invention was assigned by inventors Albert and

Burke to Heidelberger Druckmaschinen AG. The assignment was recorded on June 5, 2000 at reel 010878/ frame 0623.

2. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

3. STATUS OF CLAIMS

Claims 1 to 11 and 13 to 17 are pending. Claims 1 to 11 and 13 to 17 have been finally rejected as per the Final Office Action dated August 27, 2003. Claim 12 has been canceled.

The rejection to claims 1 to 11 and 13 to 17 thus is appealed. A copy of appealed claims 1 to 11 and 13 to 17 is attached hereto as Appendix A.

4. STATUS OF AMENDMENTS AFTER FINAL

No amendments after final were made.

5. SUMMARY OF THE INVENTION

The present invention provides a method for controlling tension in a web (e.g., 8 in Fig. 2, see, e.g., specification at page 5, line 18) of a printing press (e.g., 10 in Fig. 2, see, e.g., specification at page 5, line 16), the printing press including an infeed (e.g., 12 in Fig. 2, see, e.g., specification at page 5, line 17), printing units (e.g., 14 in Fig. 2, see, e.g., specification at page 5, line 18) and a folder (e.g. 36 in Fig. 2, see, e.g., specification at page 5, line 26), the method comprising the steps of: increasing an infeed (e.g., 12 in Fig. 2, see, e.g., specification at page 5, line 16) tension in the web (e.g., 8 in Fig. 2, see, e.g., specification at page 5, line 18) between the infeed (e.g., 12 in Fig. 2, see, e.g., specification at page 5, line 16) and the printing units (e.g., 14 in Fig. 2, see, e.g., specification at page 5, line 18) in response to a signal indicating a change to a printing mode from a white web mode (see, e.g., specification at page 6, line 24 to page 6, line 28); and decreasing the infeed tension (see, e.g.,

specification at page 7, lines 8 to 10) in the web (e.g., 8 in Fig. 2, see, e.g., specification at page 5, line 18) in response to a further signal indicating a change from the printing mode to the white web mode (see, e.g., specification at page 7, lines 8 to 10).

A substantially similar tension may be maintained in the web after the printing units during the change from the printing mode to the white web mode (see, e.g., specification at page 6, line 28 to page 7, line 2).

The signal is independent of press speed (see, e.g., specification at page 6, line 24 to page 6, line 28).

The signal creates a discontinuous variation in the tension of the web as plotted with respect to time speed (e.g. in line 74 Fig. 3; see, e.g., specification at page 6, line 24 to page 6, line 28).

The present invention also provides a web printing press (e.g., 10 in Fig. 2, see, e.g., specification at page 5, line 16) with an infeed (e.g., 12 in Fig. 2, see, e.g., specification at page 5, line 17) for providing a web of material to be printed (e.g., 8 in Fig. 2, see, e.g., specification at page 5, line 18). At least one printing unit (e.g., 14 in Fig. 2, see, e.g., specification at page 5, line 18) is provided for printing the web, the printing unit having a printing mode and a white web mode (see, e.g., specification at page 6, line 24 to page 6, line 28) as is a folder (e.g. 36 in Fig. 2, see, e.g., specification at page 5, line 26) for cutting the web into signatures. A controller (e.g. 50 in Fig. 2, see, e.g., specification at page 6, line 24) controls the tension in the web between the infeed and the at least one printing unit and the tension after the at least one printing unit, the controller controlling the tension between the infeed and the at least one printing unit in response to a signal indicating a transition between the printing mode and the white web mode (see, e.g., specification at page 6, lines 24 to 28).

The controller receives inputs concerning printing mode and press speed (e.g. 50 in Fig. 2, see, e.g., specification at page 6, lines 24 to 28).

6. ISSUES

Whether claims 1, 2, 6, 10, 11 and 14 should be rejected under 35 U.S.C. § 102(e) as being anticipated by Jurkewitz et al. (U.S. Patent No. 5,996,492). Whether claims 3 to 5, 8 and 9 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Jurkewitz et al. Whether claim 7 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Jurkewitz et al. in view of Sainio et al. (U.S. Patent No. 6,085,956). Whether claims 13 and 15 to 17 should be rejected under 35 U.S.C. § 102(b) as being anticipated by Huth (U.S. Patent No. 4,838,498).

7. GROUPING OF CLAIMS

Since the claims do not stand or fall together, the following groupings are appropriate:

GROUP I: Claims 1, 3, 4, 14 and 17;

GROUP II: Claims 2 and 5;

GROUP III: Claims 6 to 9 and 11;

GROUP IV: Claim 10;

GROUP VI: Claims 13 and 16; and

GROUP VII: Claim 15.

8. ARGUMENTS

GROUP I: Claims 1, 3, 4, 14 and 17;

Claims 1 and 14 were rejected under 35 U.S.C. § 102(e) as being anticipated by Jurkewitz. Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jurkewitz et al. Claim 17 was rejected under 35 U.S.C. § 102(b) as being anticipated by Huth.

Claim 1 recites “increasing an infeed tension in the web between the infeed and the printing units in response to a signal indicating a change to a printing mode from a white web mode.”

A white web mode is one in which the web is running through the press but is not being printed. The increase of the tension of the present invention thus is independent of press speed.

Jurkewitz does not teach increasing an infeed tension in response to a signal indicating a change to a printing mode from a white web mode.

Jurkewitz increases an infeed tension from P_0 to P_1 solely in response to the speed S_0 . Jurkewitz describes that at S_0 the pressure is increased from P_0 to P_1 , irrespective of the printing mode or white web mode. This is clear because S_0 can be zero (see column 4, line 10), so that the pressure can be increased when the web is still, and thus independently of the printing/white web status. Even if S_0 is a very slight web speed, Jurkewitz does not indicate at all that the printing press is not printing or printing below this speed, or that any pressure is changed in response to a signal indicating a change to a printing mode from a white web mode. Jurkewitz controls based on web speed, which is independent of the printing or white web mode.

There is absolutely no teaching in Jurkewitz that the web traveling below speed S_0 in Jurkewitz is at a white web mode, and does not discuss a white web mode at all.

Withdrawal of the rejection under 35 U.S.C. § 102(e) to claim 1 and its dependent claims is respectfully requested.

Claims 3 and 4 were rejected under 35 U.S.C. § 103 as being unpatentable over Jurkewitz. In view of the comments with respect to claim 1 above, withdrawal of the rejection to dependent claims 3 and 4 is also respectfully requested. Claim 17 depends from claim 1 but faces a totally different rejection under Huth. Huth discloses manual devices such as push buttons and levers for setting pressure tension and speed. There is absolutely no teaching or disclosure in Huth of “decreasing an infeed tension in response to a signal indicating a change from a printing mode to a white web mode” as claimed in claim 1 and thus withdrawal of the anticipation rejection under 35 U.S.C. 102(b) for claim 17 is respectfully requested.

GROUP II: Claims 2 and 5;

Claim 2 recites that the infeed tension is increased so that a substantially similar tension is maintained in the web after the printing units during the change from the printing mode to the white web mode. Claim 5 has a similar limitation.

Claim 2 was rejected under 35 U.S.C. § 102(e) as being anticipated by Jurkewitz et al , and claim 5 under 35 U.S.C. § 103 in view of Jurkewitz et al.

Jurkewitz does not show or disclose maintaining a similar tension in the web after the printing units during the change from the printing mode to the white web mode, as claimed in claim 2.

Withdrawal of the rejections with respect to claims 2 and 5 is respectfully requested.

GROUP III: Claims 6 to 9 and 11;

Claim 6 recites a web printing press comprising:

- an infeed for providing a web of material to be printed;
- at least one printing unit for printing the web, the printing unit having a printing mode and a white web mode;
- a folder for cutting the web into signatures; and
- a controller for controlling the tension in the web between the infeed and the at least one printing unit and the tension after the at least one printing unit, the controller controlling the tension between the infeed and the at least one printing unit in response to a signal indicating a transition between the printing mode and the white web mode.

Claims 6 and 11 were rejected under 35 U.S.C. § 102(e) as being anticipated by Jurkewitz et al. (U.S. Patent No. 5,996,492). Whether claim 7 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Jurkewitz et al. in view of Sainio et al. (U.S. Patent No. 6,085,956). Claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jurkewitz et al.

Jurkewitz does not disclose or teach a controller “controlling the tension between the infeed and the at least one printing unit in response to a signal indicating a transition between the printing mode and the white web mode” as claimed in claim 6. Jurkewitz does not disclose or teach a signal indicating a transition between a printing mode and a white web mode at all.

Withdrawal of the rejection to claim 6 and its dependent claims is respectfully requested.

GROUP IV: Claim 10;

Claim 10 recites the web printing press as recited in claim 6 wherein the controller receives inputs concerning printing mode and press speed, and was rejected under 35 U.S.C. § 102(e) as being anticipated by Jurkewitz et al. (U.S. Patent No. 5,996,492).

However Jurkewitz does not teach or disclose an input to a controller concerning a printing mode. Withdrawal of the rejection to claim 10 for this reason as well is respectfully requested.

GROUP VI: Claims 13 and 16;

Claim 13 depends from claim 1 and recites the method as recited in claim 1 wherein the signal is independent of a speed of the printing press. Claim 16 recites the method as recited in claim 1 wherein the change from the printing mode to the white web mode occurs independent of a speed of the printing press.

Claim 1 recites “increasing an infeed tension in the web between the infeed and the printing units in response to a signal indicating a change to a printing mode from a white web mode; and

decreasing the infeed tension in the web in response to a further signal indicating a change from the printing mode to the white web mode.”

Claims 13 and 16 have been rejected under 35 U.S.C. 102(b) as being anticipated by Huth.

Huth discloses manual devices such as push buttons and levers for setting pressure tension and speed. There is absolutely no teaching or disclosure in Huth of increasing or decreasing an infeed tension in response to a signal indicating a change from a printing mode to a white web mode as recited in claim 1, and thus withdrawal of the anticipation rejection under 35 U.S.C. 102(b) for claims 13 and 16 is respectfully requested. Nor has the final office action addressed Huth in detail with respect to claim 1.

GROUP VII: Claim 15.

Claim 15 recites the method as recited in claim 14 wherein the impulse signal creates a discontinuous variation in the tension of the web as plotted with respect to time.

Claim 15 was rejected under 35 U.S.C. 102(b) as being anticipated by Huth.

There is absolutely no indication or teaching in Huth of this limitation, nor has any been asserted.

Withdrawal of the rejection to claim 15 for this reason as well is respectfully requested.

Respectfully submitted,

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APPENDIX A:

PENDING CLAIMS 1 to 11 and 13 to 17 OF
U.S. APPLICATION SERIAL NO. 09/534,466

Claim 1 (previously presented) A method for controlling tension in a web of a printing press, the printing press including an infeed, printing units and a folder, the method comprising the steps of:

increasing an infeed tension in the web between the infeed and the printing units in response to a signal indicating a change to a printing mode from a white web mode; and

decreasing the infeed tension in the web in response to a further signal indicating a change from the printing mode to the white web mode.

Claim 2 (original): The method as recited in claim 1 wherein the infeed tension is increased so that a substantially similar tension is maintained in the web after the printing units during the change from the printing mode to the white web mode.

Claim 3 (original): The method as recited in claim 1 wherein the tension is controlled via a PLC.

Claim 4 (original): The method as recited in claim 3 wherein the PLC is connected to a LAN.

Claim 5 (original): The method as recited in claim 1 wherein the tension after the printing units is controlled by a PLC controller so as to maintain a substantially similar tension in the web during the change from the printing mode to the white web mode.

Claim 6 (previously presented): A web printing press comprising:

an infeed for providing a web of material to be printed;

at least one printing unit for printing the web, the printing unit having a

printing mode and a white web mode;

a folder for cutting the web into signatures; and

a controller for controlling the tension in the web between the infeed and the at least one printing unit and the tension after the at least one printing unit, the controller controlling the tension between the infeed and the at least one printing unit in response to a signal indicating a transition between the printing mode and the white web mode.

Claim 7 (original): The web printing press as recited in claim 6 further comprising a chill unit and a slitter located between the printing units and the folder.

Claim 8 (original): The web printing press as recited in claim 6 further comprising a LAN connected to the controller.

Claim 9 (original): The web printing press as recited in claim 6 wherein the controller is a PLC.

Claim 10 (original): The web printing press as recited in claim 6 wherein the controller receives inputs concerning printing mode and press speed.

Claim 11 (original): The web printing press as recited in claim 6 wherein the web printing press is an offset lithographic printing press.

Claim 13 (previously presented): The method as recited in claim 1 wherein the signal is independent of a speed of the printing press.

Claim 14 (previously presented): The method as recited in claim 1 further comprising receiving the signal at a controller and sending an impulse signal by the controller to alter the tension.

Claim 15 (previously presented): The method as recited in claim 14 wherein the

impulse signal creates a discontinuous variation in the tension of the web as plotted with respect to time.

Claim 16 (previously presented): The method as recited in claim 1 wherein the change from the printing mode to the white web mode occurs independent of a speed of the printing press.

Claim 17 (previously presented): The method as recited in claim 1 further comprising ascertaining the change in a processor.